Special Issue

Bioengineering Strategies for Cardiac Tissue

Message from the Guest Editor

Cardiovascular disease is a major cause of death and morbidity globally. Bioengineering living cardiovascular tissue promises to help in treating some of these diseases like Congenital Heart Defects (CHDs). Indeed, a major problem with corrective surgery for such CHDs is the lack of living replacement materials with the capacity of growth and regeneration. Additionally, bioengineering living cardiovascular tissue offers a tool for studying the pathology and therapy of cardiovascular diseases. This Special Issue of Bioengineering will focus on the bioengineering strategies for cardiovascular tissue and aims to showcase high-quality contributions addressing current challenges in this field. Topics of interest include but are not limited to stem cell research: cardiovascular tissue engineering: scaffolds and biomaterials; tissue decellularization and cell seeding; cell differentiation; 3D cell culture; 3D bioprinting; bioreactors; tissue-engineered vessels; tissueengineered cardiac patches; cardiovascular disease modeling; and translational cardiovascular medicine.

Guest Editor

Dr. Mohamed Ghorbel Bristol Heart Institute, Bristol Medical School, University of Bristol, Bristol BS2 8HW, UK

Deadline for manuscript submissions

closed (31 May 2025)



Bioengineering

an Open Access Journal by MDPI

Impact Factor 3.7 CiteScore 5.3 Indexed in PubMed



mdpi.com/si/205867

Bioengineering Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 bioengineering@mdpi.com

mdpi.com/journal/ bioengineering





Bioengineering

an Open Access Journal by MDPI

Impact Factor 3.7 CiteScore 5.3 Indexed in PubMed





About the Journal

Message from the Editor-in-Chief

You are invited to contribute a research article or a comprehensive review for consideration and publication in *Bioengineering* (ISSN 2306-5354). *Bioengineering* is published in open access format – research articles, reviews and other contents are released on the Internet immediately after acceptance. The scientific community and the general public have unlimited and free access to the content as soon as it is published. *Bioengineering* provides an advanced forum for the science and technology of bioengineering. We would be pleased to welcome you as one of our authors.

Editor-in-Chief

Prof. Dr. Anthony Guiseppi-Elie Department of Biomedical Engineering, Texas A&M University, College Station, TX 77843, USA

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, CAPlus / SciFinder, Inspec, and other databases.

Journal Rank:

JCR - Q2 (Engineering, Biomedical) Rapid Publication: manuscripts are peer-reviewed and a first decision is provided to authors approximately 19.2 days after submission; acceptance to publication is undertaken in 3.3 days (median values for papers published in this journal in the first half of 2025).

Recognition of Reviewers:

reviewers who provide timely, thorough peer-review reports receive vouchers entitling them to a discount on the APC of their next publication in any MDPI journal, in appreciation of the work done.